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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BLENMAN, AVALON	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/016,643	GOLAN ET AL.	
	Examiner	Art Unit	
	Avalon Blenman	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,11-28* is/are rejected.

7)☒ Claim(s) *10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (pages 1, 3, 7, 9, and 12, paragraphs 2 & 5, 11, 44, 56, and 66 respectively). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims **1-5, 12-20, & 22-26** are rejected under 35 U.S.C. 102(e) as being anticipated by Farrell et al. (US Patent 6,751,663), hereafter referred to as Farrell.

Regarding claim **1**, Farrell discloses a method (fig. 15) of provisioning a packet network for handling incoming traffic demands, said packet network comprising record collectors (data collectors) that generate ingress and egress files (network activity

records) which are used to determine traffic patterns for routing flows from a source to a destination in the packet network (col. 1, lines 16-30). Farrell further discloses:

- receiving configuration files (fig. 14, #318) from a capacity planning server (fig. 14, #60, FAP, "Flow Aggregation Processor", col. 18, lines 24-26), said configuration files comprising parameters in which flows are to be analyzed during a measurement interval (col.18, lines 24-28, 36-38, col. 22, lines 34-54);

- receiving flow records from an access router (fig. 1, # 12b) (col. 15, lines 21-27, col. 3, lines 51-53);

- processing the flow based on the parameters produced in the configuration files (col. 15, lines 34-40);

- generating ingress and egress files (NARs, "network accounting records") for each flow during the measurement interval (col. 7, lines 51-53, col. 10, lines 32-39); and

- periodically notifying (by trying to establish connection) the capacity planning server (FAP) when ingress and egress flies (NARs) for the measurement interval are available for upload (col. 17, lines 47-55);

- uploading the ingress and egress files (NARs) to the capacity planning server (col. 17, lines 55-58);

- determining whether the packet network has adequate capacity based on the traffic patterns established from the uploaded ingress and egress files (NARs); and if the capacity is not adequate, rerouting future flows through the packet network in order to establish adequate capacity (col. 5, lines 29-34)

Regarding claims **2-5**, Farrell further discloses:

- the configuration files (fig. 14, #318) comprise a start time and duration (schedule) for the measurement interval (col. 15, lines 23-27)

- the configuration files (fig. 14, #318) comprise parameters (policy) that define the measurement interval (schedule) as one or more intervals that occur at a designated day and time every week (col. 15, lines 23-27)

- the configuration files (fig. 14, #318) comprise parameters (policy) that define the measurement interval (schedule) as a designated date and time (col. 15, lines 23-27)

  [A schedule will inherently designate dates and times for various activities, Farrell establishes that the pre-defined schedule is contained in the policy of the configuration file (col. 22, lines 34-54*). In*

further support, this information is also contained in the NAR (col. 8, table 1, START_TIME, SESSION_TIME.]

- the configuration files (fig. 14, #318) comprise parameters (policy) that specify measurements to be generated on a continuous basis (hourly) (co. 22, lines 34-54)

Regarding claims **12 & 13**, Farrell further discloses:

- each record collector (FDC) comprises software to receive flow records exported by access routers (fig. 1, #12a) in a same service node (col. 15, lines 47-54)

- each record collector (FDC) receives flow records (metrics) for incoming and outgoing flows ("information in/out") on external interfaces of access routers (col. 10, lines 32-39)

Regarding claim **14**, Farrell inherently teaches a flow record will always be received within the measurement interval (col. 8, table 1, SESSION_TIME).

- each record collector determines if a flow record is received within the measurement interval (col. 8, table 1, SESSION_TIME) by comparing a start time (col. 8, table 1, START_TIME) and end time (START_TIME +

SEESION_TIME, col. 19, lines 51-56) of the measurement interval with a time corresponding to the receipt of the flow record

Regarding claims **15-17**, Farrell further discloses:

- each record collector (FDC) examines an incoming interface index and an outgoing interface index in a flow record (metrics) to determine if the flow record is for an incoming or outgoing flow (inherent to derive flow descriptor, col. 12, lines 55-64)

- each record collector (FDC) creates an ingress record ("information in" metric) for an incoming flow (col. 10, lines 32-39)

- an ingress record (metric) comprises source address (SCR_ADDR), destination address (DST_ADDR), type-of-service (SCR_TOS), byte count (SCR_OCTECTS), packet count (SCR_PKTS), and egress router count (ACCT_LINK_COUNT) (col. 8-9, lines 18-20, table 1)

  [Farrell implies that each link contains a router (i.e. "a router link, col. 10, lines 33-39, therefore, the route count is directly proportional to the number of links transversed.]

Regarding claim **18**, Farrell implicitly discloses:

- the egress router count (col. 9 table 1, ACCT_LINK_COUNT) in the ingress record (NAR) is initialized to zero

  [this is obvious feature for any counter in a network when considering a time to live (col. 8, table 1, DST_TTL) or hops parameter.]

Regarding claim **19 & 25**, Farrell further discloses:

- each record collector (FDC) stores ingress/egress records (metrics) generated during the measurement interval in ingress files (NARs) (col. 10, lines 43-47, fig. 15, step #352)

Regarding claim **20 & 26**, Farrell further discloses:

- each record collector (FDC)creates separate ingress/egress files (NARs) for each access router (fig. 1, #12a) associated with the record collector (col. 10, lines 65-66, inherent for each NAR_ID)

Regarding claims **22-24**, Farrell further discloses:

- each record collector (FDC) creates an egress record (metrics) for an outgoing flow (col. 7, lines 51-53, col. 10, lines 32-47)

- the egress record (metrics) contains source address (SCR_ADDR) and destination address (DST_ADDR) (col. 8, table 1)

- the egress record (metrics) contains source address (SCR_ADDR) , destination address (DST_ADDR) , and type-of-service (DST_TOS) (col. 8, table 1)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim **6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Garcea et al. et al. (US Publication 2005/21748), hereafter referred to as Garcea.

In analogous art, Garcea discloses a method comprising a record collector (fig. 2, # 34, "metric gathering and aggregation system") that generates files ("operational metrics") based on configuration files received from an interface (page 2, paragraph 24, fig. 7a).

Regarding claim **6**, Farrell does not explicitly disclose a configuration file expressed in XML. Nonetheless, this feature would have been an obvious modification to the system disclosed by Farrell as evidenced by Garcea. Garcea discloses:

- the configuration files are expressed in Extensible Markup Language XML (page 3, paragraph 30)

Given this feature, at the time of the invention, one of ordinary skill in the art would have readily recognized the advantages and desirability of combing the methods of Farrell and Garcea where the configuration files received form the capacity planning server (Farrell) are expressed in XML (Garcea).

The motivation for doing so would be so that a single configuration files could be distributed to a plurality of record collectors without the need to individually distribute the configuration file (Garcea, page 3, paragraph 30).

Claim **7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Leong et al. et al. (US Patent 6,269,398), hereafter referred to as Leong and in further view of Schawaller et al. (US Patent 5,881,237), hereafter referred to as Schwaller.

In analogous art, Leong discloses a method (fig. 3a) of provisioning a packet network for handling incoming traffic demands, said packet network comprising record collectors (fig. 2, #201, servers) that generate ingress and egress files (collected data)

which are used to determine traffic patterns for routing flows from a source to a destination in the packet network (col. 7, lines 24-33).

Schwaller discloses a method (fig. 5 & 5A) of provisioning a packet network for handling incoming traffic demands, said packet network comprising record collectors (fig. 2, # 22 & 24, endpoints) that generate ingress and egress files (performance report) which are used to determine traffic patterns for routing flows from a source (fig. 2, # 15, endpoint) to a destination (fig. 2, # 17, endpoint) in the packet network (col. 3, lines 35-49).

Regarding claim **7**, Leong discloses:

- the configuration files (fig. 2, SNMP/telnet) include a name or address for each record collector (sever), a name or loopback address for each access router (col. 7, lines 49-54, col. 8, lines 23-31)

Leong does not explicitly disclose a configuration file containing the name and address of the capacity planning server. Nonetheless, this feature would have been an obvious modification to the method disclosed by Leong as evidenced by Schwaller. Schwaller discloses:

- the configuration files (console node message) include a name (APPC TP name) and address (TCP port address) for the capacity planning

server (fig. 2, #20, console node) (col. 7, lines 48-51, col. 29, lines 55-62)

[the name and address is inherently specified in the console node message in order for the endpoint to be able to discern this information while listening]

Given these features, at the time of the invention, one of ordinary skill in the art would have readily recognized the advantages and desirability of combing the methods of Farrell, Leong and Schwaller where the configuration file would contain the names and addresses of the capacity planning server (Schwaller), as well as the record collector and the access router (Leong). The motivation for doing so would be so that the via the configuration file, the capacity planning server can specify a record collector and router or interest from a plurality of record collectors and routers (Leong, col. 7, lines 49-54). Additionally, record collectors can listen for configuration files from capacity planning servers (Schwaller, col. 29, lines 59-62), perhaps. Perhaps as a determination if the a particular capacity planning sever is authorized to a record collectors retrieved flow records (Farrell, col. 7, table 1, ACCNT_AUTHENTIC).

Claim **8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Leong in view of Schwaller and in further view of Garcea.

Regarding claim **8**, Farrell in view of Leaong and Schwaller do not explicitly teach a configuration file expressed in XML. Nonetheless, as set forth above in reference to claim 6, this feature would have been an obvious modification to the method disclosed by Farrell as evidenced by Garcea. (page 3, paragraph 30).

Given this feature, at the time of the invention, one of ordinary skill in the art would have readily recognized the advantages and desirability of combing the these teachings where the configuration files received form the capacity planning server (Farrell) are expressed in XML (Garcea).

The motivation as set for above in reference to claim 6, would be so that a single configuration file could be distributed to a plurality of record collectors.

Claim **9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Leong.

Regarding claim **9**, Farrell does not explicitly disclose a configuration file that identify external interfaces for each access router. Nonetheless, this feature would have been an obvious modification to the method disclosed by Farrell in view of Leong. Leaong discloses:

- the configuration files (telnet configuration file) identify external interfaces for each access router (col. 14, steps 1-4)

Given this feature, at the time of the invention, one of ordinary skill in the art would have readily recognized the advantages and desirability of combing the methods of Farrell & Leong where the configuration files identify the external interfaces for each access router.

The motivation for doing so would be so that this information could govern the parameters in the configuration file sent to the record collector (see Leong col. 3, line 64 – col. 4, lines 2).

Claim **11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Leong and in further view of Garcea.

Regarding claim **11**, Farrell in view of Leong do not explicitly disclose a configuration file expressed in XML. Nonetheless, this feature would have been an obvious modification to the system disclosed by Farrell in view of Leong as evidenced by Garcea (page 3, paragraph 30).

Given this feature, at the time of the invention, one of ordinary skill in the art would have readily recognized the advantages and desirability of combing these where the configuration files received form the capacity planning server (Farrell) are expressed in XML (Garcea).

The motivation for as set forth above in reference to claim 6, would be so that a single configuration files could be distributed to a plurality of record collectors.

Claims **21, 27, & 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Diebboll et al. et al. (US Patent 5,886,643), hereafter referred to as Diebboll.

In analogous art, Diebboll discloses a method (fig. 3) of provisioning a packet network for handling incoming traffic demands, said packet network comprising record collectors (fig. 1, # 20, probes) that generate ingress and egress files (poll data) which are used to determine traffic patterns for routing flows from a source (fig., 1, #12, nodes) to a destination (fig. 1, #12, nodes) in the packet network (col. 2, lines 1-18). Diebboll further discloses:

Regarding claim **21 & 27**, Farrell further discloses:

- each record collector (FDC) creates separate ingress/egress files (NARs) for each access router (fig. 1, #12a) associated with the record collector (col. 10, lines 65-66, inherent for each NAR_ID)

Farrell does not explicitly disclose creating separate ingress/egress file for each virtual private network (VPN) to which each access router is connected. Nonetheless

this feature would have been an obvious modification to the method disclosed by Farrell as evidenced by Diebboll. Diebboll discloses:

- (claim 21) each record collector (probe) creates separate ingress/egress files (poll data) for each virtual private network (VPN) (fig. 1, #10, segment, col. 3, lines 54-64) to which each access router (fig. 1, #14) is connected (col. 6, lines 19-21, 30-34, fig. 2, #74)

Given this feature, at the time of the invention, one of ordinary skill in the art would have readily recognized the advantages and desirability of combing the methods of Farrell and Diebboll where each of Farrell's record collectors (Farrell) would also create separate ingress/egress files for each VPN associated with the record collector (Diebboll).

The motivation for doing so would be so that these files could provide a view of the network for access routers and their associated VPNs (see Diebboll col. 8, lines 37-45).

Regarding claim **28**, Farrell does not explicitly disclose the periodic notification of the capacity planning server of the availability of ingress and egress files further comprises byte and packet counts. Nonetheless, this feature would have been an obvious modification to the method disclosed by Farrell as evidenced by Diebboll. Diebboll discloses:

- the step of periodically notifying the capacity planning server (fig. 1, #40, NMS, network management server) of total byte and packet counts (col. 2, lines 27-32)

Given this feature, at the time of the invention, one of ordinary skill in the art would have readily recognized the advantages and desirability of combing the methods of Farrell and Diebboll where the capacity planning server would periodically be notified when ingress and egress files are available for upload (Farrell) as well as the byte and packet counts for each ingress and egress file (Diebboll).

The motivation for doing so would be so that the capacity planning server could identify and tag the ingress and egress files of particular interest (see Diebboll, col. 7, lines 43-46)

Allowable Subject Matter

Claim 10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Bruins et al. (US Patent 6,308,148) discloses a method exporting and using data relating to flows in a flow switching network and responsive to message flow patterns.

- Beigi et al. (US Patent 6,36,056) discloses a method of monitoring network performance metrics.

- Maltz et al. (US Publication 2002/0143926) discloses a method for collecting traffic data in a computer network.

- Chandra et al. (US Patent 6,397,356) discloses a method for performance testing of computer networks.

- Phaal (US Publication 2002/0165956) discloses a method for monitoring network traffic of remote hosts scattered throughout the Internet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avalon Blenman whose telephone number is (571) 272-5864. The examiner can normally be reached on Mon-Fri, 7:00 AM - 4:30 PM (even date Mons. off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

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